

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-22 (cancelled)

Claim 23 (Currently Amended) A method of killing soil pathogens and soil parasites comprising
a contacting step, during which at least one of a soil pathogen and a soil parasite is contacted with a composition comprising a seed flour containing at least one glucosinolate and the enzyme myrosinase, wherein the seed flour contains a seed selected from the group consisting of seeds of *Brassica carinata* A. B., seeds of *Capparaceae*, and seeds of *Barbarea verna*; wherein the seed flour has been de-oiled at a temperature below 75°C; and
a release step, during which hydrolysis of the glucosinolate takes place in the presence of water so that isothiocyanates are released from the composition to at least one of the soil pathogen and soil parasite.

Claim 24 (Original) The method of Claim 23, wherein the soil parasites are selected from the group consisting of nematodes and wireworms.

Claim 25 (Original) The method of Claim 23, wherein the soil parasites are selected from the group consisting of weeds and insects.

Claim 26 (Original) The method of Claim 23, wherein the parasites are selected from the group consisting of *Fusarium clumorum*, *Meloidogyne incognita* (Kofoid and White) Chitwoody, *Agriotes sordidus*, *Agriotes utulatus*, and *Agriotes brevis*.

Claim 27 (Cancelled)

Claim 28 (Original) The method of Claim ~~27~~23, wherein the flour is fungitoxic to a fungi of the genus *Fusarium*.

Claim 29 (Previously Presented) The method of Claim 1731, and further comprising an identification phase to identify the seed flour containing at least one glucosinolate and at least one enzyme selected from the group consisting of glucosidasic enzymes and thioglucosidasic enzymes.

Claim 30 (Original) The method of Claim 29, wherein the at least one enzyme is myrosinase.

Claim 31 (Currently Amended) A method of improving soil comprising a contacting step, during which a soil is contacted with a seed flour containing at least one glucosinolate and the enzyme myrosinase, wherein the seed flour is toxic to at least one organism selected from the group consisting of a nematode, a wireworm, a weed, an insect, *Meloidogyne incognita* (Kofoid and White) Chitwoody, *Agriotes sordidus*, *Agriotes utulatus*, and *Agriotes brevis*, and a fungi of the genus *Fusarium*; wherein the seed flour has been de-oiled; and
a release step, during which hydrolysis of the glucosinolate takes place in the presence of water so that isothiocyanates are released from the composition to the organism.

Claim 32 (Original) The method of Claim 31, wherein the seed flour has been de-oiled at a temperature below 75°C.

Claim 33 (Currently Amended) A method of improving soil comprising
a contacting step, during which a the soil is contacted with a flour made from at least one seed selected from the group consisting of seeds of *Brassica carinata* A. B., seeds of *Capparaceae*, and seeds of *Barbarea verna* wherein the flour has been de-oiled at a temperature below 75°C; and
a release step, during which isothiocyanates are released from the composition into the soil.

Claim 34 (Original) The method of Claim 33, wherein the flour is toxic to at least one organism selected from the group consisting of a nematode, a wireworm, a weed, an insect, *Meloidogyne*

incognita (Kofoid and White) Chitwoody, *Agriotes sordidus*, *Agriotes utulatus*, and *Agriotes brevis*, and a fungi of the genus *Fusarium*.

Claim 35 (New) A method of improving soil comprising

a contact step, during which the soil is contacted with a composition comprising a seed flour containing at least one glucosinolate and enzyme myrosinase, wherein the seed flour contains a seed selected from the group consisting of seeds of *Brassica carinata* A.B., seeds of *Capparaceae*, and seeds of *Barbarea verna*; wherein the seed flour has been de-oiled; and

a release step, during which hydrolysis of the glucosinolate takes place in the presence of water so that isothiocyanates are released from the composition into the soil.

Claim 36 (New) The method of Claim 35, wherein the seed flour has been de-oiled at a temperature below 75° C.

Claim 37 (New) The method of Claim 36, wherein the seed flour has been de-oiled at ambient temperature.

Claim 38 (New) The method of Claim 35, wherein the seeds comprise seeds of *Brassica carinata* A.B.

Claim 39 (New) The method of Claim 35, wherein the seeds comprise seeds of *Capparaceae*.

Claim 40 (New) The method of Claim 35, wherein the seeds are of at least two different vegetable varieties.

Claim 41 (New) The method of Claim 17, wherein the seeds comprise seeds of *Brassica carinata* A.B.